



PATENT  
03317-P0014B WWW/TMO

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Fang Ma <i>et al.</i>	
Serial No.: 10/047,134	Conf. No.: 4266	Filing Date: January 15, 2002
Title of Application:	System for Simulating Trading of Financial Assets	
Group Art Unit: 2128	Examiner: Silver, David	

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Transmittal of Appeal Brief**

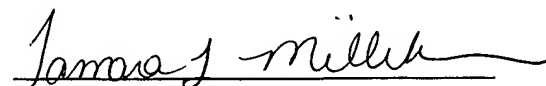
Dear Sir:

Having filed a Notice of Appeal to the Board of Patent Appeals and Interferences on March 3, 2006, Applicant hereby transmits its Appeal Brief.

1. **Appeal Brief.** Transmitted herewith is the Appeal Brief with respect to the Notice of Appeal filed on March 3, 2006 in the above-captioned matter.
2. **Time To File.** The Notice of Appeal in the above-captioned matter was filed on March 3, 2006. This Appeal Brief is timely filed within two months thereafter, without extensions of time.

Certificate of Mailing: I hereby certify that this correspondence is today being deposited with the U.S. Postal Service as FIRST CLASS MAIL in an envelope addressed to: Mail Stop Appeal Brief - Patents; Commissioner for Patents; P.O. Box 1450; Alexandria, VA 22313-1450.

March 22, 2006

  
Tamara L. Millikan

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Appellant: Fang Ma *et al.*  
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3. **Fee for Filing Appeal Brief.** Pursuant to 37 C.F.R. 41.20(b)(2), the fee for filing the Appeal Brief is \$250.00. Applicant claims small entity status.
4. **Fee Payment.** Attached is a credit card authorization in the amount of \$250.00. This is also a petition and a request to charge to Account No. 19-4516 for any additional extension and/or fee as may be required or credit for any excess fee paid.

Respectfully submitted,

March 16, 2006



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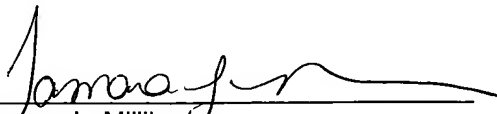
**Appeal Brief Under 37 CFR §41.37**

Dear Sir:

A Notice of Appeal from the final rejection of Claims 1-18, all pending claims of U.S. Patent Application No. 10/047,134, having been previously filed on March 3, 2006, Applicant now files its Appeal Brief. A Claims Appendix is submitted herewith, as are Appendices related to evidence previously submitted and decisions related to the case.

Certificate of Mailing: I hereby certify that this correspondence is today being deposited with the U.S. Postal Service as FIRST CLASS MAIL, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief – Patents; Commissioner for Patents; P.O. Box 1450; Alexandria, VA 22313-1450.

March 22, 2006

  
Tamara L. Millikan

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01 FC:2402 250.00 0P

**(i) Real Party In Interest**

The real party in interest is Westport Financial, LLC, assignee of the present patent application.

**(ii) Related Appeals and Interferences**

There are no related Appeals or Interferences.

**(iii) Status Of Claims**

Claims 1-18, all pending claims of the present application, stand rejected and are the subject of the instant Appeal. A copy of each of these claims is attached hereto in the Claims Appendix.

**(iv) Status Of Amendments**

There are no pending or unentered Amendments. On February 10, 2006, Applicant filed a Response to the Final Office Action dated January 6, 2006. The Response, however, contained no amendments.

**(v) Summary Of Claimed Subject Matter**

Claims 1, 13 and 16 are the independent claims.

Independent Claim 1

Claim 1 is directed to a system (10) for simulating trading of financial assets, which system includes a computer (14). See, e.g., Spec. ¶¶ 0023-0025 and Figs. 1, 3 and 4. Software (22) executing on the computer (14) displays a first time interval and a first corresponding price of a plurality of time intervals and corresponding prices (37). See, e.g., Spec. ¶¶ 0023, 0027, 0029, 0030 and Fig. 1. At least some of the plurality of time intervals and corresponding prices (37) are based on historical data. See, e.g., Spec. ¶¶ 0029, 0030 and Fig. 1. Software (24) executing on the computer (14) receives an indication (40) of a decision to trade, and software (26) executing on the computer (14) simulates the trade. See, e.g., Spec. ¶¶ 0023, 0024, 0026-0028 and Fig. 1. Software (28) executing on the computer (14) repeatedly displays a next time interval and a next corresponding price of the plurality of time intervals and corresponding prices (37), software (42) executing on the computer repeatedly receives indications (40) of decisions to trade based upon the next time interval and the next corresponding price of the plurality of time intervals and corresponding prices (37), an software (26) executing on the computer (14) repeatedly simulates trades based upon the repeatedly received indications (40) of decisions to trade. See, e.g., Spec. ¶ 0028 and Fig. 1.

Independent Claim 13

Claim 13 is directed to a system (10) for simulating trading of financial assets, which system includes a computer (14). See, e.g., Spec. ¶¶ 0023-0025 and Figs. 1, 3 and 4. Software executing on said computer receives a request (44) to display specified information, and software (22) executing on the computer (14) displays a first time interval and a first corresponding price of a plurality of time intervals and corresponding prices (37). See, e.g., Spec. ¶¶ 0023, 0027, 0029, 0030, 0033 and Fig. 1. At least some of the plurality of time intervals and corresponding prices (37) are based on historical data. See, e.g., Spec. ¶¶ 0029, 0030 and Fig. 1. Software executing on the computer (14) displays the specified information, and software (24) executing on the computer (14) receives an indication (40) of a decision to trade, and software (26) executing on the computer (14) simulates the trade. See, e.g., Spec. ¶¶ 0023, 0024, 0026-0028, 0033 and Fig. 1. Software (28) executing on the computer (14) repeatedly displays a next time interval and a next corresponding price of the plurality of time intervals and corresponding prices (37), software (42) executing on the computer repeatedly receives indications (40) of decisions to trade based upon the next time interval and the next corresponding price of the plurality of time intervals and corresponding prices (37), an software (26) executing on the computer (14) repeatedly simulates trades based upon the repeatedly received indications (40) of decisions to trade. See, e.g., Spec. ¶ 0028 and Fig. 1.

Independent Claim 16

Claim 16 is directed to a method (110) for providing a simulated trading environment for trading financial assets. See, e.g., Spec. ¶¶ 0023-0025, 0034 and Figs. 1-4. A computer (14) is provided, a time interval is displayed (step 112) on the computer (14), and a price of a financial asset corresponding to the time interval is displayed (step 114). See, e.g., Spec. ¶¶ 0023, 0027, 0029, 0030, 0034, 0035 and Figs. 1, 2. An indication to trade the financial asset is received (step 116), and the trade according to the indication to trade is simulated (step 118). See, e.g., Spec. ¶¶ 0023, 0024, 0026-0028, 0034, 0036 and Figs. 1, 2. A next time interval and a next corresponding price of a plurality of time intervals and corresponding prices are repeatedly displayed (step 120), indications of decisions to trade based upon the next time interval and the next corresponding price are repeatedly received (step 124), and trades based upon the repeatedly received indications of decisions to trade are repeatedly simulated (step 126). See, e.g., Spec. ¶¶ 0028, 0037 and Figs. 1, 2. At least some of the time intervals and corresponding prices are based on historical data. See, e.g., Spec. ¶¶ 0029, 0030 and Fig. 1.

**(vi) Grounds Of Rejection To Be Reviewed On Appeal**

All claims stand rejected under 35 U.S.C. §103(a) as being unpatentable over Klein (U.S. Patent No. 6,709,330) in view of O'Shaughnessy (U.S. Patent No. 6,484,151) and over Klein in view of Applicant's admissions.

**(vii) Argument**

The present invention, as claimed, is directed to a system and method for simulating the trading of financial assets, which system and method simulates trading by presenting to the user a series of time intervals and corresponding prices and processing trades indicated by the users based on this series of time intervals and corresponding prices. All claims have been previously amended to highlight the fact that, in the inventive system and method of the present invention, at least some of the time intervals and corresponding prices are based on historical data.

Applicant respectfully submits that at least the above-highlighted elements, required by all claims of the present application, as amended, are not disclosed, taught or suggested by the prior art cited by the Examiner, or by any other prior art of which Applicant is aware.



Klein is directed to an options simulation engine for an options trading game. The simulation engine comprises a game engine for keeping track of game time and game settings, an options market simulator for simulating a real-world options trading environment, and a portfolio manager engine for keeping track of a player's portfolio. The options market simulator comprises a basic stock price generator for moving stock prices, a news/rumor generator for moving stock prices, and an options pricing generator for pricing options. The portfolio manager comprises an available cash/minimum balance mechanism for determining how much a player is charged for buying and/or selling options and stocks, and for maintaining a player's positions, a risk analysis mechanism for determining the amount of money a player can lose for any given stock or option, a margin requirements mechanism for keeping track of the minimum equity required in a player's account to support the player's total investment position, a profit and loss mechanism for determining a player's profit and loss throughout the game and on a weekly basis, and a trading rules/limitations mechanism that prevents a player from breaking a trading rule or exceeding a limitation during game play.

It should be noted, however, that nowhere does Klein disclose, teach or suggest that at least some of the time intervals and corresponding prices are based on historical data, as is required by all claims, as amended. This is expressly recognized by the Examiner at page 3, lines 13-15 and at page 7, lines 13-15 of the Final Office Action

mailed January 6, 2006. Instead, the Examiner relies upon O'Shaughnessy and Applicant's admissions as disclosing this missing element, and asserts that it would have been obvious to one having ordinary skill in the art to have combined these purported teachings of O'Shaughnessy and Applicant's admissions with Klein to arrive at the claimed invention. Applicant respectfully disagrees for at least two reasons.

First, Applicant respectfully submits that neither O'Shaughnessy nor Applicant's admissions disclose the element missing in Klein (i.e., the use of time intervals and corresponding prices which are based on historical data in a system for simulating trading of financial assets).

O'Shaughnessy is directed to a portfolio management system which assists an investor in selecting and purchasing stocks in accordance with various portfolio strategies. O'Shaughnessy does not disclose, teach or suggest in any way a simulated trading environment, never mind a simulated trading environment in which simulated trades are based upon time intervals and corresponding prices based on historical data, as is required by all claims, as amended. While O'Shaughnessy does disclose that historical information is displayed to the investor, the historical information is used only to evaluate whether particular trading strategies should be pursued and/or whether particular stocks should be purchased. Historical information is not used in any way to

simulate trading over a historical time period in the context of a simulated trading environment, as is required by all claims, as amended, of the present application.

The system discussed in the Background section of the present application (i.e., Applicant's admissions cited by the Examiner), is merely a system which allows a trader to evaluate the performance of a particular trading strategy. For example, a user may specify a particular trading technique, such as, for example, selling a technology stock when the market price is either 5 dollars above or below the buying price. Once the user's parameters have been specified, the system may chart the performance of the technology stock as compared with actual historical performance of that stock in order to demonstrate how the specified particular trading technique would have performed. However, although historical data is employed by this system, the historical data is used only to evaluate whether particular trading strategies should be pursued. Historical information is not used in any way to simulate trading over a historical time period in the context of a simulated trading environment, as is required by all claims, as amended, of the present application.

Thus, none of Klein, O'Shaughnessy or Applicant's admissions disclose, teach or suggest in any way the use of time intervals and corresponding prices which are based on historical data in a system for simulating trading of financial assets. Applicant acknowledges that the use of historical data for numerous purposes has been known

for centuries. Historical data is used in determining whether to loan persons money, in determining sentences in criminal cases, in deciding whether or not to date particular persons, in evaluating whether particular trading strategies should be pursued and/or whether particular stocks should be purchased (as is the case with O'Shaughnessy and Applicant's admissions), etc. However, Applicant respectfully submits that, to the best of its knowledge, historical information has never been used in order to simulate trading over a historical time period in the context of a simulated trading environment, as is required by all claims, as amended, of the present application.

Moreover, even if it was discovered that historical information has, in fact, been used in order to simulate trading over a historical time period in the context of a simulated trading environment, Applicant respectfully submits that it would not have been obvious to modify Klein to incorporate this element.

It is well settled that the mere fact that references can be combined or modified does not render the resultant combination or modification obvious unless the prior art also suggests the desirability of the combination or modification. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). It is also well settled that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

In the present case, Applicant respectfully submits that it would not have been obvious to have modified Klein to employ time intervals and corresponding prices which are based on historical data. First of all, a large portion of the disclosure of Klein is devoted to explaining, in detail, the algorithms and methods used to create and generate the fictitious data upon which the simulated trading is based. If historical data were substituted for the fictitious data contemplated by Klein, a large portion of the teachings of Klein would be superfluous. One skilled in the art reading Klein would understand that the generation of fictitious data is one of the central elements, if not the most central element, of Klein, and would not have modified Klein to remove this element.

Moreover, Klein is concerned with providing a game. Although Klein does discuss that one of the purposes of the game is to educate the player, a major purpose of Klein, as with any game, is to provide a fun and exciting experience to the player. The algorithms disclosed in Klein for generating the fictitious data upon which the simulated trading is based, are specifically designed to so provide a such fun and exciting experience in order to keep game players entertained by presenting the player with unexpected and interesting situations. Such would not necessarily be the case if the time intervals and corresponding prices were based on historical data, which

oftentimes might lead to ordinary and mundane situations, and therefore ordinary and mundane gameplay.

This fact is not a problem, however, in connection with the present invention, which rather than being directed to a game, is directed to a system for providing a test environment for trading assets. In fact, one of the main stated objects of the invention is to provide "a testing environment that provides a realistic relation to actual financial markets." (See ¶ 0006 of the present application). Thus, the present invention is concerned with allowing a user to evaluate his/her performance in a real-world environment. In fact, the system would allow the user to determine how his/her performance would have been at a particular time in history. For example, suppose the time intervals and corresponding prices were based on historical data for XYZ stock during the time period from January 1, 2000 to December 31, 2000. At the end of the simulation, the system of the present invention could inform the player that he/she would have had a specific gain or loss had he/she been trading XYZ stock during the year 2000. This information, based on real world historical data, would be much more useful to an investor attempting to gauge his/her trading experience level than would ensuring that the user has an exciting time playing a game based upon fictitious data.

Thus, not only is there no motivation provided in any of the cited prior art to modify Klein as suggested by the Examiner, but Klein itself also teaches away from


such a modification, since the modification suggested by the Examiner would render Klein unsatisfactory for its intended purpose (i.e., providing a fun and exciting experience in order to keep game players entertained by presenting the player with unexpected and interesting situations) in many instances.

### **Conclusion**

For the foregoing reasons, Applicant respectfully submits that the claimed invention embodied in each of claims 1-18 is patentable over the cited prior art. As such, Applicant respectfully requests that the rejections of each of claims 1-18 be reversed and the Examiner be directed to issue a Notice of Allowance allowing each of claims 1-18.

Respectfully submitted,

March 16, 2006

  
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**Claims Appendix  
to Appeal Brief Under 37 CFR §41.37  
Serial No. 10/047,134**

1. A system for simulating trading of financial assets, comprising:
  - a computer;
  - software executing on said computer for displaying a first time interval and a first corresponding price of a plurality of time intervals and corresponding prices, at least some of said plurality of time intervals and corresponding prices being based on historical data;
  - software executing on said computer for receiving an indication of a decision to trade;
  - software executing on said computer for simulating the trade;
  - software executing on said computer for repeatedly displaying a next time interval and a next corresponding price of the plurality of time intervals and corresponding prices;
  - software executing on said computer for repeatedly receiving indications of decisions to trade based upon said next time interval and said next corresponding price of the plurality of time intervals and corresponding prices; and
  - software executing on said computer for repeatedly simulating trades based upon said repeatedly received indications of decisions to trade.



2. The system according to claim 1, wherein some of said plurality of time intervals and corresponding prices are based on fictitious data.
3. The system according to claim 1, wherein all of said plurality of time intervals and corresponding prices are based on historical data.
4. The system according to claim 1, wherein said historical data is selected from the group consisting of news, stories, events, market performance, and combinations thereof.
5. The system according to claim 1, wherein the plurality of time intervals and corresponding prices are displayed graphically.
6. The system according to claim 1, further comprising software executing on said computer for displaying a recommendation based upon the decisions to trade.
7. The system according to claim 1, further comprising software executing on said computer for evaluating performance as compared to financial benchmarks.
8. The system according to claim 1, further comprising software executing on said computer for providing a plurality of time intervals and corresponding prices for a portfolio of financial assets.

9. The system according to claim 1, further comprising software executing on said computer for receiving indications of trades from a plurality of users.

10. The system according to claim 9, further comprising software executing on said computer for evaluating performance as compared to other users.

11. The system according to claim 1, wherein the displayed time intervals and corresponding prices do not indicate their source of origin.

12. The system according to claim 1, wherein the plurality of time intervals and corresponding prices are based upon randomly selected historical data.

13. A system for simulating trading of financial assets, comprising:

a computer;

software executing on said computer for receiving a request to display specified information;

software executing on said computer for displaying a first time interval and a first corresponding price of a plurality of time intervals and corresponding prices, at least some of said plurality of time intervals and corresponding prices being based on historical data;

software executing on said computer for displaying specified information;

software executing on said computer for receiving an indication of a decision to trade;

software executing on said computer for simulating the trade;

software executing on said computer for repeatedly displaying a next time interval and a next corresponding price of the plurality of time intervals and corresponding prices;

software executing on said computer for repeatedly receiving indications of decisions to trade based upon said next time interval and said next corresponding price of the plurality of time intervals and corresponding prices; and

software executing on said computer for repeatedly simulating trades based upon said repeatedly received indications of decisions to trade.

14. The system according to claim 13, wherein said specified information is requested by a user.

15. The system according to claim 13, wherein said specified information is selected from the group consisting of news, stories, events, market performance, a historical time period, and combinations thereof.

16. A method for providing a simulated trading environment for trading financial assets, comprising the steps of:

providing a computer;

displaying a time interval on said computer;  
displaying a price of a financial asset corresponding to said time interval;  
receiving an indication to trade the financial asset;  
simulating the trade according to said indication to trade;  
repeatedly displaying a next time interval and a next corresponding price of a plurality of time intervals and corresponding prices;  
repeatedly receiving indications of decisions to trade based upon said next time interval and said next corresponding price;  
repeatedly simulating trades based upon said repeatedly received indications of decisions to trade; and  
wherein at least some of the time intervals and corresponding prices are based on historical data.

17. The method according to claim 16, further comprising the step of receiving user specified information.

18. The method according to claim 17, further comprising the step of displaying said user specified information.

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**Evidence Appendix  
to Appeal Brief Under 37 CFR §41.37  
Serial No. 10/047,134**

No evidence of any kind, including evidence submitted under 37 CFR 1.130, 1.131 or 1.132, has been entered by the Examiner and relied upon by Appellant in the appeal.

**Related Proceedings Appendix  
to Appeal Brief Under 37 CFR §41.37  
Serial No. 10/047,134**

There are no related Appeals or Interferences. As such, there are no decisions rendered by a court or the Board in any such Appeals or Interferences.